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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,911	07/10/2003	Michael Yip	2717P029C	4219
8791 7590 08/10/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040				
EXAMINER HYUN, SOON D				
ART UNIT 2616		PAPER NUMBER		
MAIL DATE 08/10/2007		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/617,911	Applicant(s) YIP ET AL.	
	Examiner Soon D. Hyun	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-3, 12, and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,618,388. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 4 of U.S. Patent Number 6,618,388 encompasses the limitations of claims 1 and 14 of instant application. Moreover, omission of a reference element whose function is not needed would be obvious to one of ordinary skill in the art. It is well settled that the omission of an element and its functions is an obvious expedient if the remaining elements performs the same function as before *In re Karlson*, 163 USPQ 184 (CCPA 1963). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-17 and 24-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Rekhter et al U.S. Patent Number 7,154,889.

Re Claim 1, fig. 1 (VLAN architecture) teaches PE1, P1, P2, PE2 routers (a metropolitan area network) servicing CE (at least one of customers) wherein the CE2 is associated with VPN V (at least one domain); PE 2 (a first switch) is capable of segregating data packets from CE (a one of the of the customers) into the routers (MAN supporting VLAN) wherein the each VPN (each domain) are associated with the CE (the same one of the plurality of customers) for servicing (See col. 6, lines 32-65).

Re Claim 2, refer to Claim 1, PE 2 performs tagging of a data packet received from CE2 wherein the CE2 is associated with VPN V (VMAN ID identifying the customer); further performs forwarding of the tagged data packet to the CE1 wherein the CE1 is associated a second domain (a second one of the plurality of domains) and the same VPN V (the same VMAN ID).

Re Claim 3, refer to Claim 1, wherein the P2 and P1 perform routing of the tagged data packets to the PE1 (a second switch), wherein the PE1 performs matching

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of the VPN ID (a VMAN ID that matches a VMAN ID) and destination address of the data packet (a destination host specified in the data packet).

Re Claims 4 and 5, refer to Claim 1, wherein PE1 and PE2 are located at the edge.

Re Claims 6, 14, and 25, refer to claim 1, wherein P1 and P2 are located at the core.

Re Claims 7, 8, 15, and 26, refer to Claim 1, wherein the VPN can be associated with VLAN application (See col. 44, lines 27-35) whereby the VPN ID is inscribed in the data packet.

Re Claims 9, 10, and 11, refer to Claim 1, fig. 9 teaches a third party ISP (a common third party service; application service provider) supporting multiple VLAN service wherein MAN network supported by ISP interconnects each VPN domain (a second VMAN) associated with customers.

Re Claims 12 and 24, refer to Claims 1 and 3, wherein the PE 1 (a remote switch) performs stripping the tag (VMAN tag) from the received data packet and forwards to the CE 1 (the remote customer...the local customer domain).

Re Claim 13, refer to Claim 11, CE 1 (hosts) belongs to VPN V (identical VLANs).

Re Claims 16 and 27, refer Claim 12, wherein the PE 2 receives untagged frame from CE 2.

Re Claims 17, 28, and 29, refer to Claim 15, wherein fig. 3 teaches the frame format for supporting VLAN application whereby the tags are inscribed (two well known fields...802.1Q tagged frame).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-22 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rekhter et al U.S. Patent Number 7,154,889.

Re Claims 18-21 and 30-32, refer to Claim 7, Rekhter teaches that fig. 1 can support VLAN application. Rekhter fails to explicitly teach the "hexadecimal value" to indicate the VLAN type, VMAN type and VMAN ID. However, one skilled in the art would have motivated to any values to indicate the required field in the 802.1Q frame to support the VLAN application; hence, the values used to indicate these fields above is non-consequential to the invention as a whole.

Re Claims 22 and 33, the extra length in the tagging of the data frame extends the length of the data packet received.


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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hyun, Soon Dong phone number is 571-272-3121. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


S. Hyun
7/24/2007


CHI PHAM
SUPERVISORY PATENT EXAMINER

7/25/07